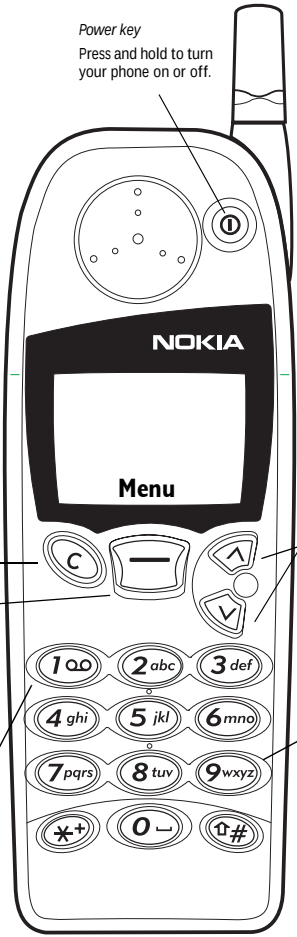
NOKIA

CONNECTING PEOPLE

OWNER'S MANUAL

NOKIA 5190

Keys



Power key

Press and hold to turn your phone on or off.

C key

Clears characters from the screen. Press and hold to return to the start screen.

Navi™ key

Its current function is displayed above it. Use to access the menu, make calls, etc.

Voice mail

Press and hold 1 to access voice mail (see p. 22).

Scroll keys

Press to scroll through menus and phone book. They also adjust speaker volume while in a call.

Emergency 9 key

See p. 29.

Quick guide to functions

Call functions

Make a call	Enter phone number, press **Call**
Answer a call	Press **Answer**
Answer a call with call waiting	Press **Options**, select **Answer**
End a call	Press **End**
Reject a call	Press C
Reject a call with call waiting	Press **Options**, select **Reject**
Redial	Press ▲, scroll to number, press **Call**

Adjust call volume	Press ▲ or ▼ during a call
Use the in-call menu	In a call, press C, press **Options**
Use 1-touch dialing	Press and hold one of keys 2 through 8

Phone book functions

Save a number	Enter a number, press ▲ or ▼, press **Save**, enter a name, press **OK**
Find a name/number	Press ▼, scroll or enter first letter of name
Find a name/number during a call	Press C, press **Options**, select **Phone book**
View associated phone number	Scroll to name, press and hold #⇧

Store a 1-touch dial number	Press **Menu** 1 7, scroll to desired key, press **Assign**, select name or number, press **OK**

Other essential shortcuts

Turn Keyguard on	Press **Menu** *+
Turn Keyguard off	Press **Unlock** *+
Check voice mail	Press and hold the 1 key (see p. 22)
Choose a quick alert setting	Briefly press ⓘ, select setting, press **OK**
Turn lights on for 15 seconds	If Keyguard is off, press any key; If Keyguard is on, briefly press ⓘ

Quick guide to the menu

Access menu	Press **Menu**
Scroll	Press ▽ or △
Go back a level	Press C
Exit the menu/ access start screen	Press and hold C
Menu shortcuts	Press **Menu**, then the menu number

Phone menu shortcuts

Note: Menu items in your phone vary depending on the network, SIM card, and accessories used.

1 Phone book
- 11 Search
- 12 Add entry
- 13 Edit
- 14 Erase
- 15 Send entry
- 16 Options
- 17 1-touch dialing
- 18 Service nos.

2 Messages
- 21 Text messages
- 22 Message settings
- 23 Voice mailbox number
- 24 News & info service
- 25 Service command editor

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- 93 Ringing volume
- 94 Message alert tone
- 95 Keypad tones
- 96 Warning tones
- 97 Vibrating alert

Indicators and Icons

You have an active call.

You have one or more new voice messages.

You have one or more new text messages. (If blinking, text message memory is full.)

Keyguard is on. Your phone will not accept any keypresses. To turn it off, press **Unlock**, then (*+).

The alarm clock is set.

The **Silent** quick alert setting is selected, or you have set the ringing option to **Silent**.

Incoming voice calls are being forwarded to another number. (1 above this icon means calls to line 1 are forwarded; 2 means calls to line 2 are forwarded; 12 means calls to both lines are forwarded.)

Analog mode is active *(see "Optional analog module" on page 64)*.

Your phone is roaming outside its home system.

The phone is ready for you to enter a response.

Characters entered will be upper-case letters. Press the (#) key to switch letter case.

Characters entered will be lower-case letters. Press the (#) key to switch letter case.

Characters entered will be numbers. (When entering letters, switch to numbers by pressing and holding the (#) key.)

You are in "special character" mode; select a character, then press **Use**. (When entering letters, switch to special characters by pressing the (*+) key.)

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1. For your safety

Read these simple guidelines before using your phone. Failure to comply with these guidelines may be dangerous or illegal.

Road Safety Comes First

Don't use a hand-held phone while driving; park the vehicle first.

Switch Off In Hospitals

Follow any regulations or rules. Switch phone off near medical equipment.

Switch Off On Aircraft

Wireless phones can cause interference. Using them on aircraft is illegal.

Switch Off When Refueling

Don't use phone at a refueling point. Don't use near fuel or chemicals.

Switch Off Near Blasting

Do not use the phone where blasting is in progress. Observe restrictions, and follow any regulations or rules.

Interference

All wireless phones may get interference which could affect performance.

Use Sensibly

Use only in the normal position (to ear). Don't touch the antenna unnecessarily.

Qualified Service

Only qualified service personnel must install or repair equipment.

Accessories and Batteries

Use only approved accessories and batteries. Do not connect incompatible products.

FCC/Industry Canada Notice

Your phone may cause TV or radio interference (for example, when using a telephone in close proximity to receiving equipment). The FCC or Industry Canada can require you to stop using your telephone if such interference cannot be eliminated. If you require assistance, contact your local service facility.

This device complies with part 15 of the FCC rules. Operation is subject to the condition that this device does not cause harmful interference.

Using this Guide

The wireless phone described in this guide is approved for use in GSM 1900 and AMPS networks.

Network services

A number of features included in this guide are called network services. They are special services provided by wireless service providers. Before you can take advantage of any of these network services, you must subscribe to the service(s) from your home service provider and obtain instructions for their use.

Updates

The latest version of this Owner's Manual may be found on Nokia's World Wide Web site at www.nokia.com.

2. Preparing the phone for use

Before you can use your new phone, you need to:

1 Insert a miniature SIM card (available from your service provider).

2 Attach and charge the battery.

If you purchased an optional analog module, you should attach it to the phone.

Note: The analog module is a separate accessory that may be purchased from your service provider. It allows you to make and receive calls in analog networks. See 'Optional analog module' on page 64.

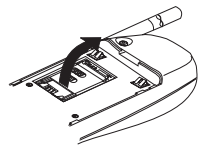
Inserting the SIM card

The SIM card and its contacts can be easily damaged by scratches or bending, so be careful when you handle, insert, or remove the card.

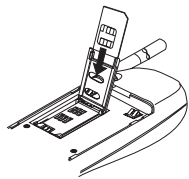
Note: Keep all miniature SIM cards out of small children's reach.

1 Ensure that the phone is off and the battery is not attached.

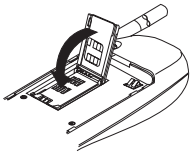
2 Open the SIM card holder on the back of the phone by sliding the latch toward the top of the phone, then lifting it up.



3 Place the SIM card in the slot. Make sure that the bevelled corner is at top right and the card's gold contacts face into the phone.

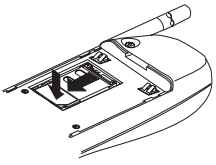


4 Close the holder.



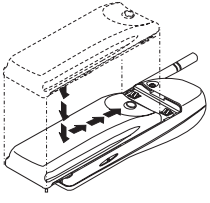
5 Slide the SIM card holder toward the bottom of the phone until it locks into place.

6 Attach the battery.

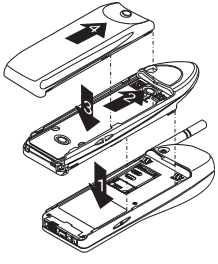


Attaching the battery

To attach the battery, place it on the back of the phone as shown and slide it toward the top of the phone until it clicks into place.



Attaching the battery when using optional analog module



1 Place the analog module on the back of the phone.

2 Slide the module toward the top of the phone until it clicks into place.

3 Place the battery on top of the analog module.

4 Slide the battery toward the top of the phone until it clicks into place.

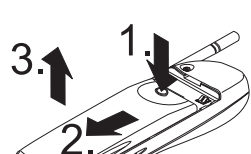
Removing the battery

Note: Switch off the phone before removing the battery!

1 Press and hold the button at the top of the battery.

2 Slide the battery toward the bottom of the phone.

3 Lift the battery off the phone.



Battery charging

Your phone is powered by a rechargeable NiMH or Li-Ion battery. Note that a new NiMH battery's full performance is achieved only after two or three complete charge and discharge cycles.

How to charge your battery

Connect the lead from the charger to the bottom of your phone or to a charging stand. Then plug the charger into a standard 120V AC outlet.

When the battery is charging, the battery strength indicator (on the right side of the display) scrolls.

Note: When you charge the battery for the first time, the battery strength indicator does not scroll the entire time; this is normal.

Problems charging

If your phone displays **Not charging**, charging is suspended. Check that the battery is not connected to a non-approved charging device. If the battery is very hot or cold, wait for a while; charging will automatically resume after the battery is restored to its normal operating state. If charging still fails, contact your dealer.

When is charging complete?

When the charge indicators stop scrolling, your phone is considered fully charged. However, a slight increase in charge may occur if you leave your phone connected to the charger.

When is a good time to charge?

You can charge anytime, but remember that when your phone displays **Battery low**, you only have a couple of minutes of talk time left.

Can I make calls while charging?

Yes, but your battery may not charge during a call. Charging should resume once you end the call.

Discharging NiMH batteries

For good operation times, discharge NiMH batteries from time to time by leaving your phone switched on until it turns itself off (or by using the battery discharge facility of any approved accessory available for your phone). Do not attempt to discharge the battery by any other means.

Important battery information

- The battery can be charged and discharged hundreds of times but it will eventually wear out. When the operating time (talk time and standby time) is noticeably shorter than normal, it is time to buy a new battery.
- Use only batteries approved by the phone manufacturer and recharge your battery only with the chargers approved by the manufacturer. When a charger is not in use, disconnect it from the power source. Do not leave the battery connected to a charger for longer than a week, since overcharging may shorten its life. If left unused a fully charged battery will discharge itself over time.
- Temperature extremes will affect the ability of your battery to charge: allow it to cool down or warm up first.
- Use the battery only for its intended purpose.

- Never use any charger or battery which is damaged or worn out.
- Do not short circuit the battery. Accidental short circuiting can occur when a metallic object (coin, clip, or pen) causes direct connection of the + and - terminals of the battery (metal strips on the back of the battery), for example when you carry a spare battery in your pocket or purse. Short circuiting the terminals may damage the battery or the connecting object.
- Leaving the battery in hot or cold places, such as in a closed car in summer or winter conditions, will reduce the capacity and lifetime of the battery. Always try to keep the battery between 59º F and 77º F (15º C and 25º C). A phone with a hot or cold battery may temporarily not work, even when the battery is fully charged. NiMH batteries' performance is particularly limited in temperatures below 14º F (-10º C). Li-ion batteries' performance is particularly limited in temperatures below 32º F (0º C).
- Do not dispose of batteries in a fire!
- Batteries must be recycled or disposed of properly. They must not be disposed of in municipal waste.

3. About the phone, keys & menu

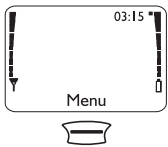
Power key

The power key has several functions:

- To turn the phone on or off, press and hold it.
- When the phone is not attached to a headset or handsfree car kit, you can press it briefly to select a quick alert setting (see page 21).
- To turn the lights on when Keyguard is on, press it briefly.

Nokia Navi™ key

Your phone's Navi™ key appears below the display. Its current function is indicated by the word that appears above it (for example, **Menu**). Simply press the Navi™ key to perform the function.



Throughout this guide, when you see "press **Menu**," "press **Listen**," etc., press the Navi™ key when that word appears above it.

Scroll keys

The scroll keys are located to the right of the Navi™ key. Use the scroll keys to browse menus and move the cursor (see page 12) to the right or the left.

C key

Use the key to:

- delete a character to the left of the cursor
- clear all characters from the display (press and hold)
- return to the previous menu level
- return from the menu to the start screen (press and hold)
- reject an incoming call

Lights

To turn your phone's lights on for 15 seconds:

- if Keyguard is off, press any key
- if Keyguard is on, briefly press the key

Start screen

The start screen appears when you first turn on your phone. **Menu** appears above the Navi™ key so you can access your phone's menu. Your phone must be at the start screen in order to use many of its features.

To get to the start screen, press and hold for a second.

Menu

Your phone's menu allows you to easily access the many powerful features in your phone.

Scroll bar

When you use your phone's menu, a scroll bar appears at the far right of the screen. This bar indicates where you are in the menu; each tab location on the bar represents a different menu item.

For example, press **Menu** once. The scroll bar appears with the first (top) tab displayed. A different tab appears each time you press one of the scroll keys .

Help text

Many menu items have brief help text. To view the help text, scroll to the menu item and wait for about 15 seconds for the text to appear. Press **More** or to see the next page of text, to see the previous page, or to return to the menu.

Phone menu shortcuts

When you select a menu item, numbers appear on the display above the scroll bar. If you become familiar with these numbers, you can use them as shortcuts for accessing different menu items. For example, to access the **Security settings** menu, you can simply press **Menu** 4 2.

Note: Menu items in your phone vary depending on the network, SIM card, and accessories used.

1 Phone book
- 11 Search
- 12 Add entry
- 13 Edit
- 14 Erase
  - 141 One by one
  - 142 Erase all
- 15 Send entry
- 16 Options
  - 161 Scrolling view
  - 162 Memory status
- 17 1-touch dialing
- 18 Service nos.

2 Messages
- 21 Text messages
  - 211 Inbox
  - 212 Outbox
  - 213 Write messages
- 22 Message settings[1]
  - 221 Set 1
  - 222 Set 2
  - 223 Set 3
  - 224 Set 4
  - 225 Set 5
  - 226 Common
    - 2261 Delivery reports
    - 2262 Reply via same center
- 23 Voice mailbox number
- 24 News & info service
  - 241 On
  - 242 Off
  - 243 Topic index
  - 244 Topics
  - 245 Language
- 25 Service command editor

3 Call log
- 31 Missed calls
- 32 Received calls
- 33 Dialed calls
- 34 Clear call lists
  - 341 All
  - 342 Missed
  - 343 Dialed
  - 344 Received
- 35 Call timers
  - 351 Last call duration
  - 352 Digital calls duration
  - 353 Analog calls duration
  - 354 Clear digital call timers
  - 355 Clear analog call timers
- 36 Show call costs
  - 361 Last call cost
  - 362 All calls cost
  - 363 Clear counters
- 37 Call cost settings
  - 371 Call cost limit
  - 372 Show costs in

4 Settings

41 Call settings
- 411 Automatic redial
- 412 Call waiting
- 413 Send own number
- 414 Line in use
- 415 Calling card
- 416 Automatic answer

42 Security settings
- 421 SIM card security
- 422 Phone security
- 423 Module security
- 424 Fixed dialing
- 425 Access codes

43 Phone settings
- 431 Language
- 432 List of own numbers
- 433 Touch tone length
- 434 Welcome note
- 435 System selection
- 436 Emergency key 9
- 437 Lights

44 Analog module settings
- 441 Digital/analog selection
- 442 Analog system selection

5 Forwarding

51 Forward all voice calls

52 Forward when not able to take calls

53 Cancel all call forwarding

6 Games

61 Memory

62 Snake

63 Logic

7 Calculator

8 Clock

81 Alarm clock

82 Clock settings
- 821 Display/Hide clock
- 822 Adjust time
- 823 Time format

9 Tones

91 Ringing options
- 911 Ring
- 912 Ascending
- 913 Ring once
- 914 Beep once
- 915 Silent

92 Ringing tone
(35 tones)

93 Ringing volume
- 931 Level 1
- 932 Level 2
- 933 Level 3
- 934 Level 4
- 935 Level 5

94 Message alert tone
- 941 No tone
- 942 Standard
- 943 Special
- 944 Beep once
- 945 Long & loud

95 Keypad tones
- 951 Off
- 952 Level 1
- 953 Level 2
- 954 Level 3

96 Warning tones
- 961 On
- 962 Off

97 Vibrating alert
- 971 On
- 972 Off

[1]*Shortcuts for sets of message settings may vary depending on the number of sets supported by your SIM card.*

Entering letters and numbers

Cursor

The cursor is a blinking vertical line that appears on the screen when you are entering text or numbers. Characters you enter appear to the right of the cursor. Pressing the C key deletes the character to the left of the cursor. Use the scroll keys to move the cursor to the right or left.

ABC mode

When your phone is ready for you to enter text, such as a name or message, it switches to ABC mode. The **ABC** icon shows that it is in ABC mode.

When **ABC** is displayed, you can enter these characters by pressing the indicated key repeatedly:

Key	Characters	Key	Characters
1	. , ? ! - 1	7	PQRS7
2	ABC2	8	TUV8
3	DEF3	9	WXYZ9
4	GHI4	0	space, 0
5	JKL5	*	See ‘Special characters in names and messages’
6	MNO6	#	Changes letter case, switches between letters and numbers

Changing letter case

Press the (#) key to switch between upper- and lower-case letters. The **ABC** icon switches to **abc** to indicate that you are using lower case.

Entering numbers

To enter numbers while in ABC mode, you can:

- press and hold the corresponding key until the number appears, or
- switch between ABC mode and number mode by pressing and holding the (#) key.

Special characters in names and messages

In ABC mode you can press the (*) key to view the special characters below. If your SIM card supports special characters, you can use these characters when saving names in your phone book or when writing text messages. Simply press ⌄ or ⌃ to highlight the one you want, then press **Use**.

. , ? ! : ; - + # * ( ) ‘ “ _ @ & $ £ % / < > ¿ ¡ § = ¥

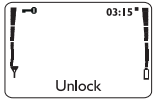
Special characters in phone numbers

You can use special characters to dial or save international phone numbers as well as phone numbers of automated services such as bank account information. When entering numbers, press the * key repeatedly to use these characters.

Character	Use
*	This character is used to send command strings to the network. Contact your service provider for details.
+	This character is a prefix used for dialing international numbers.
p	Use this character to save phone numbers of automated services that require you to enter a password or other information after the call is answered. For example, if your bank's phone number is 555-1212 and you need to enter your account number (12345) and password (6789), you could save this phone number as **5551212p12345p6789** *Note*: In digital networks, digits to the right of the **p** are sent after a 2.5-second pause. In analog networks, digits to the right of the **p** are not sent until you press **Send**.
w	This character creates a wait; digits to the right of the **w** are not sent until you press **Send**. Currently this character cannot be saved.

Keyguard (locking the keypad)

The Keyguard feature allows you to "lock" your phone's keypad so that accidental keypresses have no effect. This is handy when your phone is in a pocket or purse.



Note: Keyguard is not a security feature and will not prevent unauthorized use of your phone.

To lock the keys

Press **Menu** (*+).

To unlock the keys

Press **Unlock** (*+).

Notes about Keyguard

- When Keyguard is on, calls may be possible to the emergency number programmed into your phone (e.g. 911 or other official emergency number). However, one-key emergency dialing ('the 9 key') does not operate.
- Keyguard is automatically turned off when the phone is connected to a car kit.

4. Settings

This section describes some phone settings that you probably won't change very often, and others that allow you to customize your phone to suit your preferences. You can set them now or skip to 'Basic functions' on page 24 to get started using your phone.

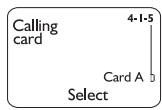
Automatic redial

Use **Menu** 4 1 1 to turn this feature on or off. When automatic redial is on, your phone will redial the number you're trying to call up to 10 times. To stop the call attempts, press **Quit** or C.

Note: Automatic redial will not redial a busy number while you initiate or answer another call.

Calling card set-up

If you wish to use a calling card for long distance calls, you must first save your calling card information into your phone. Your phone can save information about two calling cards.



Saving calling card information

1 Press **Menu** 4 1 5.

2 Scroll to the calling card you want to edit, then press **Options**.

3 Scroll to **Edit**, then press **OK**.

4 Enter your security code (see page 61), then press **OK**.

5 At **Dialing sequence**, press **Select**. Press ⌄ to choose the dialing sequence your card uses, then press **Select**.

Dialing sequence	Use for cards that require you to:	Cards using this sequence
Access number + phone number + card number	Dial 1-800 access number, then phone number, then card number (+ PIN if required)	MCI, AT&T True Choice, Sprint Canada, Unitel
Access number + card number + phone number	Dial 1-800 access number, then card number (+ PIN if required), then phone number	networkMCI, WorldPhone MCI
Prefix + phone number + card number	Dial the prefix (any numbers that must precede the phone number) and phone number you want to dial, then card number (+ PIN if required)	GTE, PacBell, AT&T, Stentor

Note: The order of the following steps may vary, depending on which dialing sequence your card uses.

6 Enter access number (usually the 1-800 number listed on the back of the calling card), then press **OK**.

7 Enter your card number and/or PIN, then press **OK**. Your phone will display **Save changes?** Press **OK**.

8 Press ⌄ to reach **Card name**, then press **Select**. Enter the card name using your phone's keypad, then press **OK**.

Note: This procedure might not work with all calling cards. Please look at the back of your calling card or contact your long distance company for more information.

Choosing a calling card to use

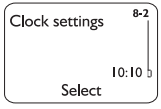
Use **Menu** 4 1 5 to select a calling card to use. You will be required to enter your security code.

Making calling card calls

See 'Calling card calls' on page 34.

Clock

Your phone has an internal clock that can be displayed on the start screen. The clock must be set for call times to be recorded (see 'Call log' on page 41).



Selecting time format

Use **Menu** 8 2 3 to set the clock's format to **24-hour** or **am/pm**.

Setting the clock

Use **Menu** 8 2 2 to enter the current time. Use two digits for both hours and minutes (for example, enter 1:30 as **0130**). If the clock's time format is set to **am/pm**, you will be asked to choose **am** or **pm**.

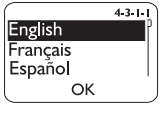
Displaying or hiding the clock

Press **Menu** 8 2 1 to display the clock on the phone's screen if it is currently hidden, or vice versa.

Language

Use **Menu** 4 3 1 to set the language of your phone's display.

The shortcut for choosing English is to press **Menu** 4 3 1 1.



Lights

If you're using your phone with a car kit, use **Menu** 4 3 7 to set your phone's lights to **On** (lights stay on) or **Automatic** (after 15 seconds, lights turn off until the next key is pressed, phone rings, etc.).

For information about turning your phone's lights on at any time, see page 9.

Send own number

Use **Menu** 4 1 3 to access this network service, which allows you to display your phone number to the person you are calling. This feature is only effective when calling a number that is equipped with Caller ID.

Preset uses the default network setting (on or off). Contact your service provider to find out what the default is.

On displays your number to people you call.

Off prevents your number from being shown to people you call.

System selection

Use **Menu** 4 3 5 to tell your phone how to choose a PCS system (network) if more than one is available. Your selection remains active until you change it or change the SIM card.

If you choose **Automatic**, the phone automatically selects an available system. The phone beeps when it switches to a different system.

If you choose **Manual**, the phone searches for and displays available systems. Scroll to the one you want, then press **Select**. The phone requests registration and displays the result. If you lose connection while in Manual mode, the phone prompts you to select a system again.

For information on analog system selection, see 'Analog system selection' on page 65.

Tones

Use **Menu** 9 to change the six sound settings in your phone: ringing option, ringing tone, ringing volume, message alert tone, keypad tones, and warning tones.

The quick alert settings feature (see page 21) allows you to quickly select a fixed combination of these settings to suit your current environment, whether you are at a soccer game or in a library.

Ringing option

Use **Menu** 9 1 to tell your phone how to notify you that you have a call.

Ring The phone rings normally using the currently selected ringing tone.

Ascending The phone rings using the currently selected ringing tone. The ringing volume starts low and increases with successive rings.

Ring once The phone rings once using the currently selected ringing tone.

Beep once The phone beeps once.

Silent The phone makes no sound. The icon appears at the start screen.

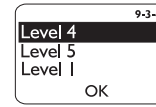
Ringing tone

Your phone plays a ringing tone when someone calls you and the ringing option is set to **Ring**, **Ascending**, or **Ring once**. Use **Menu** 9 2 to choose one of 35 ringing tones. Scroll to a tone to hear how it sounds.

Note: If the ringing option is set to **Silent***, the phone won't play sample tones.*

Ringing volume

Use **Menu** 9 3 to control the volume of your phone's ringing and of message alert tones.



Message alert tone

Use **Menu** 9 4 to choose the tone played when you receive a text message. Scroll to a tone to hear how it sounds.

Keypad tones

Use **Menu** 9 5 to adjust the volume of the tones your phone makes when you press its keys.

Warning tones

Use **Menu** 9 6 to turn your phone's warning tones on or off. Warning tones are created by events such as confirmations, errors, power on, battery low, and recharge battery. This setting also turns game sounds on and off.

Vibrating alert

If your phone has the BMS-2V vibrating battery attached, use **Menu** 9 7 to set your phone to vibrate when you receive a voice call. If you turn vibrating alert on, your phone will vibrate even if its ringing option is set to **Silent**.

Note: The vibrating battery does not work when your phone is connected to a charger or handsfree car kit.

Quick alert settings

You can quickly adjust your phone's sound settings when you go into a meeting, go outdoors, etc. To choose a quick alert setting, briefly press the ⓘ key, scroll to the setting you want, then press **OK**.

My tones This setting uses the current settings in Menu 9, Tones.

Silent All sound is turned off. The icon appears at the start screen.

Discreet Your phone beeps once when you receive a call or text message. Other tones are turned off.

Loud Your phone rings loudly. Other tones are loud as well.

Note: Whenever you change a setting in Menu 9, Tones, the phone switches the current quick alert setting to **My tones**.

Quick alert settings with headsets and car kits

When you connect your phone to a headset or handsfree car kit, the phone automatically selects the special **Headset** or **Car** quick alert setting. Neither one is available in the list of quick alert settings, and you cannot choose a different quick alert setting while these accessories are connected.

The **Headset** and **Car** settings work like the **My tones** setting, except that they remember the Menu 9 settings from the last time you used the headset or car kit. For example, if you change the ringing tone when the headset is connected, the phone uses that ringing tone the next time the headset is connected.

After you disconnect the accessory, the phone returns to the quick alert setting that was in use before you connected the accessory.

Voice mailbox number

Use **Menu** 2 3 to set your voice mailbox number. Once you set your voice mailbox number, you can press and hold the 1 key to dial your voice mailbox. The voice mailbox number is saved until you change it again. Depending on your SIM card, this number may be up to 32 digits long.

For more information on voice mail, see 'Voice messages' on page 46.

Welcome note

Use **Menu** 4 3 4 to set a welcome note for your phone. This note is displayed briefly each time you turn on your phone. It can be your name, a reminder, etc. This replaces any welcome note saved by your service provider.

5. Basic functions

Turning the phone on or off

Press and hold the ⏻ key for one second.

Note: If the phone asks for a PIN code, see 'PIN code' on page 60. If the phone asks for a security code, see 'Security code' on page 61.

NORMAL POSITION: Hold the phone as you would any other telephone, with the antenna pointed up and over your shoulder.

TIPS ON EFFICIENT OPERATION: As with any other radio transmitting device, do not touch the antenna unnecessarily when the phone is switched on. Contact with the antenna affects call quality and may cause the phone to operate at a higher power level than otherwise needed.

WARNING! Do not switch on the phone when wireless phone use is prohibited or when it may cause interference or danger.

Checking signal strength

Your phone operates on radio waves. Radio signal coverage is maintained by a wireless network, and the quality of calls on your phone depends on the strength of the wireless radio signal.

Get a strong signal

When you are at the start screen (see page 9) or in a call, the strength of the radio signal is indicated by the signal indicators on the left side of your phone's display. These indicators scroll as the signal strength increases and decreases.

To improve your phone's reception, try moving your phone slightly. If you're inside a building, move toward a window.

Making a call

1 Enter the area code and phone number. (**Menu** changes to **Call**.)

2 Press **Call** and wait for the other party to answer.

IMPORTANT!

The phone can make and receive calls only when:

- It is switched on,
- It has a valid SIM card installed, and
- It is located in the service area of a GSM 1900 or analog network (if using the optional analog module) where your SIM card can be used and the radio signal strength is adequate.

Making an international call

Enter the + character by pressing * twice. Then enter the country code, area code, and phone number, and press **Call**.

Adjusting earpiece volume

To adjust the earpiece volume, press ▽ or △ during a call. If an accessory with its own loudspeaker is connected to your phone, the scroll keys will adjust the volume for that accessory.

Ending a call

Press **End**.

Last number redial

The last eight numbers you dialed are stored in the dialed calls list. Use this list to re-dial a number you have called recently.

1 From the start screen, press ⌄ to access the dialed calls list.

2 Scroll to the number you want.

3 Press **Call**.

Saving a name and number

See ‘Saving names and numbers’ on page 37.

Finding a name and number

1 Press ⌄ to access your phone book.

2 Scroll to the number you want. (To skip ahead quickly in the list, press the number key that corresponds to the first letter of the name.)

3 Press **Call**.

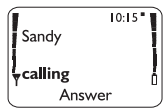
For other ways to find names and numbers, see ‘Finding names and numbers’ on page 38.

Answering a call

When someone calls, the phone will alert you (see ‘Tones’ on page 20) and **Call** will flash on the display. To answer the call, press **Answer**.

Caller ID

Caller ID is a network service that displays the phone number of the person calling you, if it is available. Check with your service provider for details.



If the caller can be identified, the phone displays the caller's phone number and **calling**. If the number matches a name saved in your phone book, the name is displayed instead. However, if the last seven digits of the phone number match more than one name in the phone book, only the phone number is displayed.

If you also subscribe to the call forwarding network service and the incoming call has been forwarded from another phone number, the phone displays **Forwarded call**, then the name or number and **calling >**.

Rejecting a call

To reject an incoming call, press . In some networks this automatically sends the call to voice mail if you have a voice-mail subscription.

6. Emergency calls

1 If the phone is not on, switch it on. Some networks may require that a valid SIM card is properly inserted in the phone.

2 Press and hold the key for several seconds to ready the phone for calls.

3 Key in the emergency number for your present location (e.g. 911 or other official emergency number). Emergency numbers vary by location.

4 Press **Call**.

IMPORTANT!

This phone, like any wireless phone, operates using radio signals, wireless and landline networks as well as user-programmed functions which cannot guarantee connection in all conditions. Therefore you should never rely solely upon any wireless phone for essential communications (e.g. medical emergencies).

Remember, to make or receive any calls the phone must be switched on and in a service area with adequate signal strength. Emergency calls may not be possible on all wireless phone networks or when certain network services and/or phone features are in use. Check with local service providers.

If certain features are in use (Keyguard, fixed dialing, etc.), you may first need to turn those features off before you can make an emergency call. Consult this document and your local cellular service provider.

When making an emergency call, remember to give all the necessary information as accurately as possible. Remember that your wireless phone may be the only means of communication at the scene of an accident - do not cut off the call until given permission to do so.

Emergency key 9

When this feature is on, the phone attempts to make an emergency call when you:

- press and hold the 9 key, or
- press 9, then press **Call**.

This feature is set to **Off** *in new phones and will not work until you turn it on.* Use **Menu** 4 3 6 to turn this feature on or off.

Note: When Keyguard is active, the only way to make an emergency call is to dial the emergency number, then press **Call**.

IMPORTANT!

Official emergency numbers (for example, 911) vary by location. Only one number is dialed automatically by Emergency Key 9, and it might not be the proper number in all circumstances.

7. Advanced functions

In-call menu

When you are in a single call, the Navi™ key function is **End**. However, your phone has an in-call menu that allows you to perform several functions while in a call. To access the in-call menu, press C to change the Navi™ key function to **Options**, then press **Options**.

Note: If you have an active call and an incoming or held call, pressing C isn't necessary; **Options** *appears automatically.*

Depending on the number of active calls and whether you are using digital or analog mode, the following in-call options may be available:

Hold/Unhold	hold or release a call
New call	make a call when you have one in progress
Answer	answer an incoming call
Reject	reject an incoming call
Swap	switch between two calls
Drop call	end the active call
End all calls	end both calls
Touch tones	send touch tones
Send	send the characters on the display
Phone book	find a name, save a phone number, etc.

Call hold

You can put a single call on hold by selecting **Hold** from the in-call menu. To return to the call, select **Unhold** from the in-call menu.

Making/receiving multiple calls

Making a new outgoing call

Select **New call** from the in-call menu, enter or find the phone number you want, then press **Call**. The first call is automatically put on hold.

The active call is indicated by the icon and the held call is indicated by the icon.

Call waiting

The call waiting network service allows you to receive an incoming call when you're already in a call. The phone beeps to let you know of the incoming call.

To turn on call waiting, press **Menu** 4 1 2, then select **Activate**. To turn call waiting off, select **Cancel**. To see whether call waiting is currently on or off, select **Status**.

To answer a waiting call, select **Answer** from the in-call menu. The call you were in is put on hold. To reject a waiting call, select **Reject** from the in-call menu. (You can also not answer the call.)

Switching between two calls in progress

Select **Swap** from the in-call menu.

Ending the active call only

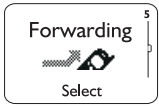
Select **Drop call** from the in-call menu. The held call becomes active.

Ending both calls

Select **End all calls** from the in-call menu.

Call forwarding

Use **Menu** 5 to access the call forwarding network service, which lets you forward your incoming calls to another phone number. Check with your service provider for details.



Forwarding calls

Call forwarding types are **Forward all voice calls** and **Forward when not able to take calls**. Choose a type, choose **Activate**, enter the number to which calls should be forwarded, then press **OK**.

Forward all voice calls forwards all calls to the number you enter. The icon appears on the start screen along with an indication of which line(s) are being forwarded (see 'Choosing an outgoing line' on page 33). To check the number to which calls are being forwarded, choose the **Status** option.

Forward when not able to take calls forwards calls only when your line is busy, your phone is turned off, there is no answer, or your phone is not in service. There is no **Status** option for this type of call forwarding.

Cancelling call forwarding

To cancel each type of call forwarding individually, use the **Cancel** option. To cancel all call forwarding, press **Menu** 5 3.

Note: Cancelling all call forwarding may also cancel any automatic forwarding of calls to voice mail that your service provider has activated for you. Contact your service provider for details.

1-touch dialing

This feature allows you to make phone calls quickly and easily with the touch of a button.

The second through eighth phone numbers you save to your phone book are automatically assigned to keys 2 through 8. You can change the key assignments using the following procedure.

Note: Keys 1 and 9 are used exclusively for dialing your voice mailbox and for attempting emergency calls, respectively (see 'Voice messages' on page 46 and 'Emergency calls' on page 28).

Assigning numbers to keys

At the start screen,

1 Press **Menu** 1 7.

2 Scroll to the key you want to assign a number to, then press **Assign**.

3 Press ⌄ or ⌃ to choose the number you want to assign to the selected key, then press **OK**.

Once you have assigned a number to a key, you can press **Options** and then view, change, or erase the number assignment.

Making calls using one-touch dialing

Press and hold a key (2 through 8) for a few seconds to call the number assigned to it. Your phone finds the phone number, displays it briefly, then dials it.

Choosing an outgoing line

Some networks offer a service that allows you to have more than one phone line—for example, one for work-related calls and one for personal calls. If you have subscribed to this service and your SIM card supports this feature, you can use **Menu** 4 1 4 to select **Line 1** or **Line 2** for outgoing calls. (You can receive calls on either line at any time.)

Tip: You can also press and hold #⃝ until the phone displays **Change the phone line?** Press **OK** to switch lines or C to cancel.

Calling card calls

Before you can make a call using a calling card, you have to enter your calling card information into the phone. See 'Calling card set-up' on page 16.

To make a call using a calling card:

1 Enter the phone number, including any prefix (such as 0 or 1) that your calling card may require when you make a calling card call. See your calling card for instructions.

2 Press and hold **Call** for a few seconds until your phone displays **Card call**.

3 Your phone displays **Wait for tone, then press OK**. Wait for the tone, then press **OK**.

4 Your phone displays **Wait for tone, press OK again**. Wait for the tone again, then press **OK**.

List of own numbers

If your SIM card supports this feature, you can use **Menu** 4 3 2 to view the phone number(s) of your SIM card. Use the scroll keys to view the numbers if there is more than one.

Automatic answer

Use **Menu** 4 1 6 to turn this feature on or off. When automatic answer is turned on, your phone answers incoming voice calls after one ring. This feature is available only when your phone is connected to a headset or to an approved handsfree car kit equipped with the ignition sense option, with the ignition on. This feature does not function with data calls.

Touch tones

Your phone can generate various sounds, called touch tones, when the keys are pressed.

Touch tones can be used for many automated, over-the-phone services such as voice mail, calling cards, and checking airline arrival/departure times and bank balances.

Note: Sending confidential information over the air using touch tones is not recommended in analog mode.

Setting touch tone length

Use **Menu** 4 3 3 to set touch-tone length to **Short** (100 ms.) or **Long** (500 ms.).

Saving touch tone strings

Touch tone strings can be used for sending and receiving information with your phone. Save touch tone strings the same way you save phone numbers (see page 26).

For example, you can save your office voice mailbox number along with your password for easy access to your messages. See 'Special characters in phone numbers' on page 14.

Sending touch tone strings

1 During a call, press , then press **Options**.

2 Scroll to **Touch tones**, then press **OK**.

3 Enter or find the touch tone string, then press **OK**.

Fax and data calls

Your phone can send and receive data and faxes via an optional data adapter that connects to the base of the phone. The phone automatically recognizes the type of the connected terminal.

Making a fax or data call

1 Using the data adapter, connect the appropriate data or fax terminal to the phone.

If you try to make a data or fax call and the data adapter is not connected or is connected incorrectly, the text

Please connect terminal will appear. Check that the data adapter is properly set up.

2 Enter or find the phone number.

3 Press **Call**.

4 End the call by pressing **End**.

For more information, refer to documentation supplied with your data adapter, data application or fax application.

Note: You cannot make a data or fax call while you have active or held calls in progress.

Receiving a fax or data call

When you receive a fax call, **Fax call** flashes on your phone's display. When you are already in a call, a waiting fax call is indicated by **F**.

When you receive a data call, **Data call** flashes on your phone's display. When you are already in a call, a waiting data call is indicated by **D**.

You can answer fax and data calls using the connected terminal or the phone's keypad.

If the data adapter is not connected or is connected incorrectly, the text **Please connect terminal** will appear. Check that the data adapter is properly set up.

Service command editor

This feature allows you to send commands to the network to activate telephone services. Contact your wireless service provider for details. Press **Menu** 2 5, compose the command (see page 12), then press **Send**.

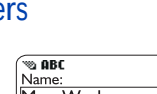
8. Phone book

Your phone allows you to save phone numbers and associated names so they are right at your fingertips for easy dialing.

Note that the maximum number of phone book entries and the maximum length of saved names and numbers depend on your SIM card.

Saving names and numbers

Saving a name and number is easy! Just enter the phone number, press ◁ or ▷, then press **Save**. Enter a name if you wish, then press **OK**.



Saving a number quickly

To save a number quickly, enter the phone number, press ◁ or ▷, then press *and hold* **Save**. The number is saved to your phone book and you can add a name to it later (see 'Editing names and numbers' on page 39).

Saving a name and number while in a call

To save a name and number while in a call, enter the number, press **Options**, scroll to **Phone book**, scroll to **Add entry**, enter a name if you like, and press **OK**. The phone displays the phone number you entered; edit it if necessary, then press **OK**.

Notes about saving names

- There are many ways to save names, and your phone book will be easier to use if you choose one method and be consistent. For example, if you save Mary's work number as **MaryW**, you might want to save Richard's mobile number as **RichardM**. Saving names the same way will help you find them faster.

- A name may appear only once in memory. If you try to save a name that already exists in memory, the phone asks if you want to replace the currently saved name.
- If you try to save a phone number and your phone book is full, you are given the option to replace an existing entry. Scroll to the entry you want to replace and press **OK**, or press C to cancel.

Finding names and numbers

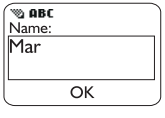
There are several ways to find names and numbers in your phone book.

From the start screen

Press ⌄ to access your phone book, then either scroll to the name/number you want *or* press the number key that corresponds to the first letter of the name (your phone displays the first matching entry at the top of the screen).

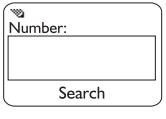
Using the Phone book menu

Press **Menu** 1 1, enter the first few letters of the name, then press **OK**. Your phone displays the first matching entry at the top of the screen.



While performing other functions

Say you're ready to send a text message to a friend whose phone number is saved in your phone book. When you are prompted to enter the phone number, you can find it instead—simply press **Search** to access your phone book.



Editing names and numbers

To edit phone book entries, press **Menu** 1 3, scroll to the entry you want to edit, then press **Edit**. Edit the name and number as needed.

Erasing names and numbers

Use **Menu** 1 4 to erase entries from your phone book. **One by one** lets you select one entry at a time to be erased. **Erase all** erases your entire phone book. (You will be required to enter your security code first.)

Exchanging names and numbers

You can use your phone to exchange names and numbers with someone else whose phone supports this feature.

To send an entry in your phone book to another person, use **Menu** 1 5. Scroll to the entry you want to send, press **Send**, enter or find the recipient's phone number, then press **OK**.

When someone sends you a name and number, your phone displays **Phone book entry received**. Press **Options**. Choose **Show** to see the name and number, **Save** to save the entry to your phone book, or **Discard** to discard the information.

Scrolling view

Use **Menu** 1 6 1 to choose a scrolling view for your phone book (**Name list**, **Name+number**, or **Name only**).

Tip: If your phone's scrolling view is set to **Name list** or **Name only**, you can view the phone number associated with a name by pressing and holding the (#) key.

Checking available memory

Use **Menu** 1 6 2 to see how many memory locations are free and how many are being used. (Each memory location holds one number and associated name.)

Service numbers

If your wireless service provider supports this feature, you can use **Menu** 1 8 to access a list of customer service phone numbers. Select a number, then press **Call**.

9. Call log

For your convenience, the call log (**Menu** 3) records the phone numbers of missed, received, and dialed calls as well as the amount of time spent in calls.

Note: Missed, received, and dialed calls lists are automatically erased when you use a SIM card that is not one of the 5 most previous cards used with the phone, or you change the phone security setting. See 'Phone security' on page 62.

The Options key

When you access **Missed calls**, **Received calls**, or **Dialed calls** and press **Options**, a list of options appears on your phone's display.

Call dials the number.

Call time shows the time of the call.

Edit number allows you to edit the number.

Save allows you to enter a name for the number, edit the number if needed, and save both to your phone book.

Erase erases the number from the call list.

View number displays the phone number if the associated name is currently displayed.

Missed calls

Your phone automatically stores the last 5 numbers that have tried unsuccessfully to reach you while your phone was on.

When the display says Missed calls

Press **List**. If you have missed more than one call, you can scroll through the list of numbers. To dial the displayed number, press **Options**, then choose **Call**.

Viewing the missed calls list at any time

Use **Menu** 3 1 to view the missed calls list at any time. To dial a number, press **Options**, then choose **Call**.

Received calls

Your phone automatically stores the phone numbers of the 5 most recent calls you've answered. Use **Menu** 3 2 to view the received calls list. To dial a number, press **Options**, then choose **Call**.

Dialed calls

Your phone automatically stores the last 8 numbers you've dialed. From the start screen, press ⏎ to access the dialed calls list. Scroll to the number you want, then press **Call**.

Note: To perform any of the options listed on page 41, access the dialed calls list by pressing **Menu** *3 3.*

Clearing call lists

Use **Menu** 3 4 to clear the missed, dialed, and/or received call lists.

Call timers

Use **Menu** 3 5 to see the amount of time you've spent in calls. For information on call timers for analog calls, see 'Call timers for analog calls' on page 66.

Note: Each phone number in your SIM card has its own timers.

Viewing call timers

Use **Menu** 3 5 to view the various call timers.

Setting timers back to 0

Use **Menu** 3 5 4 to clear digital call timers. You will be required to enter your security code.

Displaying the current call timer during calls

1 Press **Menu** 3 5 1.

2 Press **Details**.

3 Press **Select**.

4 Scroll to **On**, then press **OK**.

During a call, the amount of time spent in that call will be displayed.

Note: The actual time invoiced for calls by your service provider may vary, depending upon network features, rounding-off for billing, and so forth.

10. Controlling call costs

Your phone has features that help you control the amount of money you spend on calls.

Note: The actual invoice for calls and services from your service provider may vary, depending upon network features, rounding-off for billing, taxes and so forth.

Viewing call costs

This network service allows you to check the cost of the last or current call, or the total cost of all calls that you have made or received since the counters were last reset. Contact your service provider for details.

Note: This feature is not supported in analog mode.

Show call costs

Use **Menu** 3 6 to view **Last call cost** (cost of last call, or current call if applicable) or **All calls cost** (cost of all calls since counters were last reset).

Clear call cost counters

Use **Menu** 3 6 3 to clear call-cost counters. You will be required to enter your PIN2 code.

Show costs in

Use **Menu** 3 7 2 to tell the phone whether you want to show call costs and set call cost limits in **Currency** (dollars) or **Units** (network charging units). If you choose **Currency**, you will need to enter the price of each charging unit. This information is available from your service provider.

Note: This feature appears only if supported by your operator and SIM card.

Limiting call costs

This feature allows you to set a call cost limit for your phone. When the limit you set is reached, no calls can be made except for emergency calls.

Setting a call cost limit

Use **Menu** 3 7 1 to set a call cost limit. You will be required to enter your PIN2 code. At the **Number of units:** prompt, enter a whole number of either charging units or dollars (see 'Show costs in' on page 44).

The number of remaining units or dollars is shown when the display is clear.

Removing the call cost limit

To remove the call cost limit, press **Menu** 3 7 1, enter your PIN2 code, and choose **Off**.

11. Voice messages

Voice mail is a network service that allows callers to record a message when you cannot be reached.

Saving your voice mailbox number

See ‘Voice mailbox number’ on page 22.

Listening to voice messages

When you receive a voice message, your phone may notify you by beeping, displaying the voice message indicator , and displaying **New voice message**. The phone may display the number of messages if there is more than one.

Note: The method of notification depends on your service provider.

When your phone notifies you that you have a new voice message, press **Listen**. Your phone dials your voice mailbox number, if you have saved it.

Calling your voice mailbox at any time

Once you have saved your voice mailbox number, you can press and hold the 1 key to dial your voice mailbox.

12. Text messages

The text message network service allows you to exchange short text messages with other phones that have text message capability. You can also ask your service provider to convert the message to other formats such as e-mail and fax. The messages are first sent to your Message Center, then delivered to the recipient.

Before you can send and receive text messages, you must enter certain information into your phone. See 'Message settings' on page 50.

Writing a message

Press **Menu** 2 1 3 to write a message of up to 160 characters. The number of available characters remaining is shown in the top right corner of the display. For details on entering letters, see 'Entering letters and numbers' on page 12.

If at some point you decide to start over, press **Options**, then press **Clear screen**. You can also press and hold C. All characters are deleted from the message.

Saving a message

After writing a message, press **Options**, scroll to **Save**, then press **OK**. The message is saved in the Outbox.

Sending a message

After writing a message, press **Options**, scroll to **Send**, then press **OK**. Enter the recipient's phone number or find it in the phone book, or enter an e-mail address, then press **OK**. The message is sent using the currently selected message setting (see 'Message settings' on page 50).

Sending using alternate message setting

Send special allows you to send a message using an alternate message setting (see 'Message settings' on page 50). You choose a setting to use, then specify whether you want to enter a phone number (**Numeric**) or a routing address (**Text/numbers**). The phone will prompt you for the number or routing address.

Note: If you choose to send the message by e-mail, the phone prompts you for the e-mail address and number if you choose **Numeric** *or the e-mail address and routing address if you choose* **Text/numbers**.

A routing address may be required when sending messages via fax, page, or e-mail. For help using this feature, contact your service provider.

Reading a message

When you receive a text message, the phone displays **Message received** and the indicator, and makes a sound (depending on the message alert tone; see page 21). To read the message, press **Read**. This takes you to the Inbox, with the new message selected. Press **Read** again. If necessary, use the scroll keys to read the entire message.

After reaching the end of the message, use the scroll keys to view the sender's name or phone number, and the date and time the message was received.

When you've seen the last new message, the indicator disappears.

About the Inbox

Incoming text messages are stored in the Inbox. Use Menu 2 1 1 to access the Inbox.

You will see a list of message headers. The icon in front of the header indicates that a message has been read. The icon indicates that a message has not been read. Scroll to the message you want to read, then press **Read**.

Working with messages in the Inbox

Several options are available while you're reading a message. Just press **Options**, scroll to the one you want, then press **OK**.

Erase deletes the message. Press **OK** to confirm the deletion or C to cancel.

Reply sends a reply to the sender of the message. Enter your message, then press **Options**. Choose **Send**. The phone displays the return number. Edit the number if necessary, then press **OK**.

Edit allows you to edit a message.

Get number retrieves an included phone number from a message, if there is one. You can use it like any other number. If there is more than one number, scroll to the number you want, then press **OK**.

Forward sends the message to someone else. Edit the message, then press **Options**. **Send** is selected. Press **OK**. Enter or find the recipient's phone number, then press **OK**.

Details allows you to scroll through these details of the message, if available: sender's name and phone number, message center used for sending, reception date and time, reply path availability.

About the Outbox

Use **Menu** 2 1 2 to access the Outbox, where text messages that you have written and saved are stored. The icon in front of a message heading shows that you have attempted to send the message to the text message center. The icon shows that you have not yet tried to send the message. Press **Read** to read the selected message.

Working with messages in the Outbox

While reading a message, press **Options** to work with messages. Scroll to one of the following options.

Erase deletes the message. Press **OK** to confirm or C to cancel.

Edit allows you to edit the message.

Get number retrieves an included phone number from a message, if there is one. You can use it like any other number. If there is more than one number, scroll to the number you want, then press **OK**.

Forward sends the message to someone else. Edit the message, then press **Options**. **Send** is selected. Press **OK**. Enter or find the recipient's phone number, then press **OK**.

Message storage

The Inbox and Outbox share a fixed amount of memory in your SIM card. When there is no more room to store messages, the indicator blinks. If you are sent a text message when the memory is full, the phone displays the message **No space: message waiting**. You should delete one or more old messages to make room for the new message. The network will re-send the message at a later time.

Note: Depending on your SIM card, the Inbox and Outbox can contain a total of up to 50 messages.

Message settings

You can specify the way your phone sends text messages. Depending on your SIM card, you can have up to five "sets" of settings—for example, one for e-mail messages, one for pages, one for faxes, etc.

Changing individual sets of message settings

Use **Menu** 2 2 to edit sets of message settings. Scroll to the set you want to change, press **Select**, then choose one of the following items.

Message center number Enter the phone number of the message center you want to use to send and receive text messages. This number is available from your wireless service provider.

Messages sent as Select **Text**, **Fax**, **Page** or **E-mail** format.

Note: In order to receive a converted message, the recipient needs to have the appropriate terminal device.

Message validity Select the amount of time you want messages to be stored at the message center while waiting to be delivered.

Changing common message settings

Common message settings apply to all messages you send.

Delivery reports

Delivery reports is a network service that attempts to notify you when an outgoing message has been delivered to the recipient. Use **Menu** 2 2 6 1 (**Messages** > **Message settings** > **Common** > **Delivery reports**) to turn delivery reports on or off.

Note: The menu shortcut for this feature may differ depending on the number of sets of message settings supported by your SIM card.

Reply via same center

Reply via same center is a network service that attempts to route the reply to a text message via your own message center. Use **Menu** 2 2 6 2 (**Messages** > **Message settings** > **Common** > **Reply via same center**) to turn this feature on or off.

Note: The menu shortcut for this feature may differ depending on the number of sets of message settings supported by your SIM card.

News & info service

This network service delivers news and information such as weather and traffic reports to you via the wireless network. Contact your service provider for details.

Using the news & information service

Use **Menu** 2 4 to choose one of the following options.

On turns on News & info reception.

Off turns off News & info reception.

Topic index retrieves a list of all available topics from the network.

Topics lets you create and edit your personal topic list, and turn message delivery on or off for individual topics in your list. See "Working with topics".

Language allows you to choose one or more languages for messages. Scroll through the languages and press **Mark** to select a language or **Unmark** to deselect it. When you're done, press C, then press **Yes** to save your changes or C to cancel.

Working with topics

Use **Menu** 2 4 4 1 to add a topic to your topic list. Enter a topic number and give it a name (for example, **Weather**).

When you have at least one topic in your topic list, you have the following choices.

Select allows you to **Mark** (select) or **Unmark** (deselect) topics in your topic list for message delivery. You will receive messages about marked topics only. When you're done, press C, then press **Yes** to save your changes or C to cancel.

Edit allows you to edit an existing topic name and number.

Erase allows you to erase a topic from your topic list.

13. Other features

Games

Use **Menu** 6 to challenge yourself or a friend to the three fun games in your phone. To pause a game, press C. To resume, choose **Continue**.

For information about turning game sounds on or off, see 'Warning tones' on page 21.

REMEMBER! Your phone must be switched on to use this function. Do not switch on the phone when wireless phone use is prohibited or when it may cause interference or danger.

Memory

Reveal pictures to find pairs in as few tries as possible. Move the cursor with the 2 (up), 4 (left), 6 (right), and 8 (down) keys. Press the 5 key to reveal pictures. Once found, pairs stay visible. Press the 0# key to jump to the right over revealed pictures or to move from the bottom right of the screen to the top left. Press the *+ key to jump to the left over revealed pictures or to move from the top left of the screen to the bottom right.

Snake

Feed the snake with as many goodies as possible and watch it grow. Use keys 2, 4, 6, and 8 to turn the snake toward food. The longer the snake's tail grows, the higher your score. If the snake hits its own tail or the surrounding wall, the game is over.

Logic

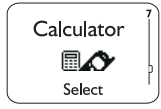
Find the secret combination of figures in a column. Possible figures are shown at the top of the display. Press the 5 key repeatedly to select a figure and the 2, 4, and 8 keys to move the cursor. Once you think you have the right combination, press the *+ key. The result appears as a set

of marks above the column. A correct figure in the right place gets a full mark; a correct figure in the wrong place gets a half mark. The game ends when the correct figures are in the right place.

Tip: To copy a figure from the previous column, move the cursor over it using the 2, 4, or 8 key, then press the 5 key.

Calculator

Your phone's calculator adds, subtracts, multiplies, divides, and converts between currencies.



REMEMBER! Your phone must be switched on to use this function. Do not switch on the phone when wireless phone use is prohibited or when it may cause interference or danger.

Using the calculator

1 Press **Menu** 7.

2 Enter the first number in the calculation.

3 To add, press * once (+ appears).
To subtract, press * twice (- appears).
To multiply, press * three times (∗ appears).
To divide, press * four times (/ appears).

4 Enter the second number.

Repeat steps 3 and 4 as many times as needed.

5 Press **Options**. **Equals** is selected. Press **OK**.

Note: Press the # key once to enter a decimal point.

Currency conversion

Before you can begin converting currencies, you need to set the exchange rate.

1 Press **Menu** 7, then press **Options**.

2 Scroll to **Exchange rate**, then press **OK**.

3 Scroll to **How many home units to a visited unit** (to enter the number of domestic units to a foreign unit) or **How many visited units to a home unit** (to enter the number of foreign units to a domestic unit).

Note: You only have to set one or the other, not both.

4 Press **OK**.

5 Enter the exchange rate (press *# to enter a decimal point).

6 Press **OK**.

Now you can do conversions.

1 Enter the amount to be converted.

2 Press **Options**.

3 Scroll to **To home** to convert to domestic units or **To visited** to convert to foreign units.

4 Press **OK**.

Alarm clock

The alarm clock feature is based on your phone's internal clock and sounds an alert at a time you specify.

Setting the alarm clock

Use **Menu** 8 1 to turn the alarm clock on or off.

Note that when you're entering the alarm time, use two digits for both hours and minutes (for example, enter 1:30 as **0130**).

When the alarm sounds

- To shut off the alarm, press any key except **Snooze**.
- If you press **Snooze**, the alarm sounds again in five minutes. To turn off the alarm before then, press **Stop**.
- If you let the alarm sound for one minute without pressing a key, it stops for five minutes, then starts again.

If you turn off the phone

If you turn off the phone and the alarm is set, the phone switches itself on at alarm time, then the alarm sounds.

- To shut off the alarm, press any key except **Snooze**. The phone displays **Keep the phone on?** Press **Yes** to keep it on or to switch it off.
- If you press **Snooze**, the phone turns itself off for five minutes, then the alarm sounds again.

REMEMBER! Do not switch on the phone when wireless phone use is prohibited or when it may cause interference or danger.

External antenna jack

At the back of the phone, below the antenna, there is a connector for an external antenna. The connector may be protected by a rubber cap. Remove the cap before connecting an external antenna. After removing the antenna, replace the cap.

Note: (1) The external antenna jack cannot be used with the optional analog module. (2) Keep the cap out of the reach of small children.

Nokia Xpress-on™ color covers

Your phone's Xpress-on™ cover is available in several fashion colors. Extra covers may be purchased from your authorized Nokia dealer.

Note: Always store the phone with cover attached.

Changing covers

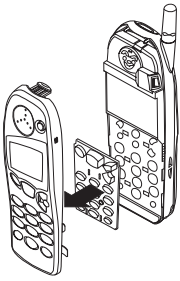
When changing covers, don't use the phone's antenna as leverage!

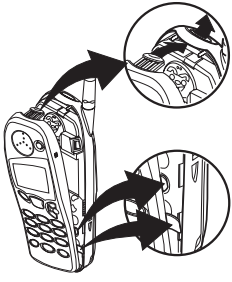
1 Switch off the power and disconnect the phone from the charger or any other device.

2 Using a coin or your finger, depress the colored tab on the top of the phone and slide the color cover forward.

3 Remove the cover.

4 Remove the rubber keypad from the back of the cover. Place it into the back of the new cover.





5 Place the bottom of the cover against the bottom of the phone. Make sure all three sets of plastic tabs line up with their respective slots, as shown at left. Close the cover and snap it shut all the way around the edge of the phone.

14. Security features

Access codes overview

Access codes consist of the PIN code, PIN2 code, security code, and module code if using the optional analog module. Use **Menu** 4 2 5 to change access codes. Avoid using access codes that are similar to emergency numbers, such as 911, to prevent accidental dialing of the emergency number.

Note: You can't change the PIN code unless SIM card security (see page 61) is on.

Code	Purpose	For more information
PIN code	If SIM card security is on, the phone requests the PIN code every time the phone is turned on.	See 'SIM card security' on page 61.
PIN2 code	Required by several phone features.	See entries for viewing call costs, limiting call costs, fixed dialing, and PIN and PIN2 codes.
Security code	Required by several phone features. If phone security is on, the phone requests the security code the first time you use it after inserting a new SIM card.	See entries for call timers, calling card set-up, erasing names and numbers, and phone security.

Code	Purpose	For more information
Module code (used with optional analog module only)	If module security is on, the phone requests the module code when the phone is turned on, the optional analog module is attached, and either (a) the module code has not been changed from the default of 12345, or (b) the module code has been changed but it is different from the security code.	See 'Module security/module code' on page 67.

PIN code

The PIN (Personal Identity Number) code is a 4- to 8-digit number usually supplied with the SIM card given to you by your service provider. If you use SIM card security, the phone will require you to enter the PIN code every time you switch on the phone.

When the phone requires the PIN or PIN2 code, it displays **Enter PIN code:** or **Enter PIN2 code:**. Enter the code, then press **OK**.

If you enter a wrong PIN code three times in succession, enter the PUK code, then press **OK**. Enter a new PIN code, then press **OK**. Re-enter the new code, then press **OK**.

PIN2 code

The PIN2 code is a 4- to 8-digit number and is supplied with some SIM cards. It may be required to access some functions.

If you enter a wrong PIN2 code three times in succession, enter the PUK2 code, then press **OK**. Enter a new PIN2 code, then press **OK**. Re-enter the new code, then press **OK**.

Security code

The security code is required by some security features, including phone security (see page 62). It comes with your phone. The default security code is 12345. Use **Menu** 4 2 5 3 to change it. Keep the new code secret and in a safe place, separate from the phone.

When the phone requires the security code, it displays **Security code:** Enter the code, then press **OK**.

If you enter an incorrect security code five times in a row, the phone will not accept the correct code for the next five minutes.

Module code

See 'Module security/module code' on page 67.

PUK and PUK2 codes

The PUK (Personal Unblocking Key) may be supplied with your SIM card. If not, contact your service provider for the code. The code is required to change a blocked PIN code.

If you enter a wrong PUK code ten times in succession, the SIM card becomes invalid. Contact your service provider for a new card.

The PUK2 code, supplied with some SIM cards, is required to change a blocked PIN2 code. If you enter a wrong code ten times in succession, you can't use the functions requiring the PIN2 code. Contact your service provider for a new card.

You can't change the PUK or PUK2 code. If you lose it, contact your service provider.

SIM card security

You can set the phone to require the PIN code every time you switch on the phone. Note that some SIM cards do not allow this feature to be turned off.

Use **Menu** 4 2 1 to turn SIM card security on. You will be required to enter your PIN code.

Phone security

When phone security is on, the phone requires the security code when you switch it on after inserting a new SIM card.

Use **Menu** 4 2 2 to turn phone security on and off.

Module security

See 'Module security/module code' on page 67.

Fixed dialing

Use **Menu** 4 2 4 to access the fixed dialing feature. This feature lets you restrict your outgoing calls to phone numbers included in the fixed dialing list or beginning with the same digit(s) as an entry in the list. For example, a fixed dialing list that includes the numbers "18886654228" and "214" allows calls to 1-888-665-4228 and to any phone number beginning with 214.

Notes about fixed dialing

- Fixed dialing works only with SIM cards that support it.
- If you turn fixed dialing on and don't have any numbers in the fixed dialing list, you can't make any calls!
- When fixed dialing is on, calls may be possible to certain emergency numbers in some networks (e.g. 911 or other official emergency number).
- You can't access the fixed dialing list like you access your phone book. Instead, press **Menu** 4 2 4 3 1, then press **Select**. At the **Name:** prompt, either enter part of the name and press **OK**, or press the scroll keys and scroll to the entry you want. (To skip ahead quickly in the list, press the number key that corresponds to the first letter of the name.)

Turning fixed dialing on or off

Use **Menu** 4 2 4 to turn fixed dialing on or off. You will be required to enter your PIN2 code.

Adding numbers to the fixed dialing list

1 Press **Menu** 4 2 4.

2 Scroll to **Numbers**, then press **OK**.

3 Scroll to **Add**, then press **Select**.

4 Enter your PIN2 code, then press **OK**.

5 Enter a name to go with the phone number (optional), then press **OK**.

6 Enter the phone number, then press **OK**.

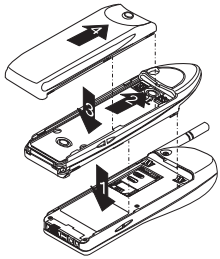
Press and repeat steps 3-6 for each number you want to add to the list.

15. Optional analog module

With an optional Nokia PLUS analog module and a dual-mode SIM card, you can use your phone in analog networks. See your dealer for details on how to purchase this accessory and activate your subscription.

Attaching the analog module

First remove the battery. See ‘Removing the battery’ on page 5.



1 Place the analog module on the back of the phone.

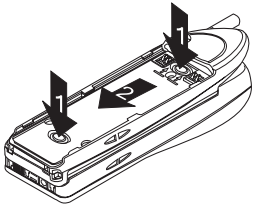
2 Slide the module toward the top of the phone until it clicks into place.

3 Place the battery on top of the analog module.

4 Slide the battery toward the top of the phone until it clicks into place.

Removing the analog module

First remove the battery. See ‘Removing the battery’ on page 5.



1 Press the buttons at the top and bottom of the analog module.

2 Slide the module down and away from the top of the phone.

Analog features

In order for you to use the analog module, your service provider will have to add certain information to your SIM card. See your service provider for details.

Once you have inserted the upgraded SIM card and attached the analog module, your phone gives you access to analog network features. Note that some features described in this manual will not be available due to the difference between digital and analog networks.

While in analog mode, the phone displays the A+ icon in the top left corner and the word **Analog** in the top center of the display.

Digital/analog selection

Use **Menu** 4 4 1 to choose a mode for your phone.

Digit. & analog means the phone will work in digital or analog networks. The phone tries to find a digital network but selects an analog network if no digital network is available.

Digital only forces the phone to use GSM 1900 digital networks only.

Analog only forces the phone to use analog networks only.

Note: It might take up to a minute for the phone to switch from one setting to another.

Analog system selection

In each analog service area there are usually two service providers. The service provider you sign up with, also known as your home system, is of type A or B. Systems that are of the same type as your home system are called “home-type” systems; systems that are of the opposite type as your home system are called “non-home-type” systems.

Your service provider may have programmed a list of preferred systems into your SIM card. Your phone may search for systems in this list when service is not available in your home system.

The analog system selection feature allows you to request the order in which your phone looks for available systems.

Choosing a system-selection method

Use **Menu** 4 4 2 to tell your phone how to select analog systems.

Note: Using **Home only** *or* **Pref. system** *is usually the most economical choice.*

Pref. system If service is not available in your home system, the phone searches for a preferred system of type A or B, then a home-type system, then a non-home-type system.

Home type If service is not available in your home system, the phone searches for a home-type system, preferred first.

Nonhome type The phone searches for a non-home-type system, preferred first.

Home only The phone uses its home system only (that is, it will not roam).

Note: In some areas, the wireless system automatically recognizes roaming phones. In other areas, you need to contact the service provider before the system can recognize your phone. The operator needs to know your phone number, your phone's IMEI or your analog module's SN (serial number), and how you plan to pay for your calls. There is normally an additional charge for roaming calls.

Your phone's IMEI is located on the back, under the battery. Your analog module's SN is located on the back of the module. Your IMEI/SN can normally be read over the air by roaming wireless service providers when you call them to register your roaming presence on their wireless network.

Call timers for analog calls

When you have the analog module attached, your phone automatically keeps track of the amount of time you've spent in analog calls. To see the call timer, press **Menu** 3 5 3.

Setting timers back to 0

Use **Menu** 3 5 5 to set analog call timers back to zero. You will be required to enter the module code.

Module security/module code

If you purchased an optional analog module, you can protect it from unauthorized use by turning on module security. When module security is on, the phone requests the module code when you turn the phone on if (a) you have not changed the module code from the default of 12345, or (b) you have changed it and it differs from the security code (see 'Changing the module code').

- If you enter the correct code, the phone allows you to access analog module functions.
- If you enter an incorrect code, you can't access analog module functions.
- If you press instead of entering the code, the phone ignores menu items that pertain to the analog module and acts as if the analog module isn't attached.

Activating module security

Use **Menu** 4 2 3 to turn module security on or off. You will be required to enter the module code.

Changing the module code

The module code is initially set to 12345. Use **Menu** 4 2 5 4 to change the module code. The phone prompts you for the existing code, the new code, and verification of the new code. At each prompt, enter the information, then press **OK**.

Appendix A: Call forwarding

The codes described in this section give you greater control over call forwarding features in GSM 1900 networks than do the menu items in your phone. For more information about call forwarding, see 'Call forwarding' on page 32.

Enter these codes using the keypad on your phone. In place of the letter N in the codes below, substitute the number to which you want to forward calls. After entering the code, press **Call**.

Call forwarding types

There are six types of call forwarding. For each type, you can activate call forwarding, request the status (including the number to which calls are being forwarded), and cancel call forwarding.

Forwarding type	Activate	Status	Cancel
When unable to take calls	**62*N#	*#62#	##62#
When no answer	**61*N#	*#61#	##61#
When busy	**67*N#	*#67#	##67#
Unconditional	**21*N#	*#21#	##21#
When unable to take calls, no answer, or busy (combines first three types)	**004*N#	*#004#	##004#
All calls (combines first four types)	**002*N#	*#002#	##002#

Example: You want to forward calls to 972-555-1111 when not able to take calls.
> Enter ****62*9725551212#** then press Call.

You just forgot which phone number you forwarded your calls to.
> Enter ***#62#** then press **Call**.

You want to cancel this particular call forward.
> Enter **##62#** then press **Call**.

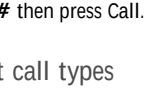
Adding a call type

You can specify whether you want call forwarding to apply only to certain types of calls by adding an asterisk (*) and two-digit code before the # in the forwarding codes listed in the previous table.

Call type	Code
All call types	10
Voice calls only	11
Data calls only	12
Fax calls only	13
Text messages only	16
All call types except text messages	19

Example: You want to forward fax calls only to 972-555-1111 when your line is busy.
> Enter ****67*9725551212*13#** then press Call.

Forwarding status of different call types



If you have used the same forwarding type for more than one type of call (for example, forward both data calls and fax calls when no answer), when you request a status you can press the scroll keys to see the forwarding status for each call type. Each type is displayed on a separate screen.

Adding a timeout

You can specify a timeout during which call forwarding is not active (i.e., call forwarding does not take effect until this number of seconds has passed after the phone receives the call attempt). To do this, adding an asterisk (*) and the time period in seconds to the codes listed above.

Example: You want to forward fax calls to 972-555-1111 when not able to take calls, but let 25 seconds pass first.
> Enter ****62*9725551111*13*25#** then press Call.

Appendix B: Accessories

An extensive range of accessories is available for your phone. You can select the accessories that best suit your specific communication needs. For availability, see your local authorized Nokia dealer.

A few practical rules for accessory operation:

- Keep accessories out of small children's reach.
- When you disconnect the power cord of any accessory, grasp and pull the plug, not the cord.
- Check regularly that all wireless phone equipment in your vehicle is mounted and operating properly.
- Installation of complex car equipment must be completed by qualified personnel only.

WARNING!

Use only batteries, chargers and accessories approved by the phone manufacturer for use with this particular phone model. The use of any other types will invalidate any approval or warranty applying to the phone, and may be dangerous.

Batteries

Several batteries are available for your phone:

- BLS-2 Extended Li-Ion 900 mAh
- BMS-2S Extended NiMH 900 mAh
- BMS-2V Extended NiMH Vibra 900 mAh
- BLS-4 Ultra Extended Li-Ion 1500 mAh

Charging times

The table below displays approximate battery charging times. These charging times will charge your phone to about 80% of its capacity, and the battery strength indicator will stop scrolling. If you wish to obtain 100% battery capacity, please allow another two hours for “maintenance” charge.

<table>
<tr><th>Battery</th><th>Standard Travel Charger ACP-7U</th><th colspan="2">Rapid Travel Charger ACP-9U</th><th>Rapid Cig. Lighter Charger LCH-9</th></tr>
<tr><td>BLS-2 Extended Li-Ion 900 mAh</td><td rowspan="3">4 hrs.</td><td colspan="2">2 hrs.</td></tr>
<tr><td>BMS-2S Extended NiMH 900 mAh</td><td colspan="2" rowspan="2">1 hr. 30 min.</td></tr>
<tr><td>BMS-2V Extended NiMH Vibra 900 mAh</td></tr>
<tr><td>BLS-4 Ultra Extended Li-Ion 1500 mAh</td><td>5 hrs.</td><td colspan="2">3 hrs. 30 min.</td></tr>
</table>

Talk and standby times

The table below displays approximate talk and standby times. Variations will occur depending on SIM card, network settings, and usage.

Battery	Talk Time		Standby Time	
	Digital	Analog	Digital	Analog
BLS-2 Extended Li-Ion 900 mAh	3 to 5 hrs.	1 hr. 30 min. to 3 hrs.	60 to 225 hrs.	16 to 26 hrs.
BMS-2S Extended NiMH 900 mAh				
BMS-2V Extended NiMH Vibra 900 mAh				
BLS-4 Ultra Extended Li-Ion 1500 mAh	5 to 8 hrs.	2 hrs. 45 min. to 5 hrs.	100 to 375 hrs.	26 to 44 hrs.

NiMH
Li-Ion

Nickel Metal Hydride and Lithium Ion batteries must be recycled or disposed of properly. They must not be disposed of in municipal waste.

Chargers and other accessories

WARNING!

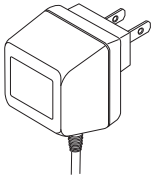
This apparatus is intended for use when supplied with power from the Standard Travel Charger (ACP-7U), Rapid Travel Charger (ACP-9U), or Rapid Cigarette Lighter Charger (LCH-9). Other usage will invalidate any approval given to this apparatus and may be dangerous.

The following chargers and other accessories are available for your phone; please see your dealer for details. Also, refer to any accessory options manual that may have been included in your sales package for the entire line of authentic Nokia accessories.

Note: When a charger is not in use, disconnect it from the power source. Do not leave the battery connected to a charger

for longer than a week, since overcharging may shorten its life. If left unused, a fully charged battery will discharge itself over time.

ACP-7U Standard Travel Charger



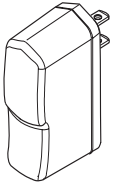
Use this durable and economical charger to charge all battery options. Plug the charger into a wall outlet and connect the connector to the bottom of your phone. Check the charging status on the phone display.

Calls can be made during charging, but charging will stop for the duration of the call and the battery bar scrolling stops.

Note: If the battery is completely empty, you cannot use the phone until it has enough charge to operate.

The Standard Travel Charger is available for different voltage levels and can also be used with the DCH-9 Compact Desktop Charging Stand.

ACP-9U Rapid Travel Charger

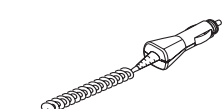


The extremely light, functionally designed Rapid Travel Charger charges your phone battery quickly.

Plug the charger into a wall outlet and connect the connector to the bottom of your phone. Check the charging status on the phone display. You can use your phone while charging.

Operating within a voltage range of 100V-240V AC (50Hz-60Hz), the Rapid Travel Charger is practically voltage-independent in normal office and household use. Like the Standard Travel Charger, the Rapid Travel Charger is compatible with all battery options. The Rapid Travel Charger can also be used with the DCH-9 Compact Desktop Charging Stand.

LCH-9 Rapid Cigarette Lighter Charger



The multivoltage Rapid Cigarette Lighter Charger allows you to charge your phone when you travel. The small charger's functional design fits well with most car lighters and interiors.

Charging times are the same as for the Rapid Travel Charger ACP-9U. Calls can be made during charging.

A green light indicates that the Rapid Cigarette Lighter Charger is ready to charge. Check the charging status on the phone display. The input voltage is 12 or 24 V DC, negative grounding.

The Rapid Cigarette Lighter Charger can be used with all accessories available for your phone.

Avoid prolonged charging with the Rapid Cigarette Lighter Charger when the car engine is not running. This may cause the battery of your car to drain.

Note: In some cars the cigarette lighter plug is not provided with power when the ignition is switched off. Verify that the green LED light is lit.

DCH-9 Compact Desktop Charging Stand

Compatible with all battery options, the Compact Desktop Charging Stand can be used with the Standard Travel Charger ACP-7U or the Rapid Travel Charger ACP-9U. The Compact Desktop Charging Stand provides mounting for both the phone and a spare battery. Plug the charger into a wall outlet and connect the connector to the back of the Compact Desktop Charging Stand. Place your phone and/or a spare battery in the stand to begin battery charging.

When the phone is charging, no lights are displayed on the stand; check the charging status of the phone battery on the phone display.

Note: If you have attached an optional analog module, be sure to remove it and replace the battery before placing the phone in the charging stand. Although the phone will fit in the stand with the analog module attached, charging will not take place.

Charging moves to the rear slot once the front battery is 100% charged.

When the spare battery is charging, check the status indicator on the left side of the charging stand. A red light indicates that the battery is charging; a green light indicates that the battery is charged to at least 80% of its capacity.

<table>
<tr><th colspan="5">DCH-9 Rear Slot Charging Times</th></tr>
<tr><th rowspan="2">Battery option</th><th colspan="2">Using ACP-7U</th><th colspan="2">Using ACP-9U</th></tr>
<tr><th>Front slot empty</th><th>Front slot full</th><th>Front slot empty</th><th>Front slot full</th></tr>
<tr><td>BLS-2 Extended Li-Ion 900 mAh</td><td rowspan="3">6 hrs. 30 min.</td><td rowspan="3">8 hrs. 30 min.</td><td rowspan="3">4 hrs. 30 min.</td><td rowspan="3">5 hrs. 30 min.</td></tr>
<tr><td>BMS-2S Extended NiMH 900 mAh</td></tr>
<tr><td>BMS-2V Extended NiMH Vibra 900 mAh</td></tr>
<tr><td>BLS-4 Ultra Extended Li-Ion 1500 mAh</td><td>12 hrs.</td><td>15 hrs. 45 min.</td><td>8 hrs.</td><td>10 hrs. 30 min.</td></tr>
</table>

The phone has the built-in intelligence to maintain the battery, so there is no need for a discharge feature on the stand.

Appendix C: Reference information

Important safety information

Traffic safety

Do not use a hand-held telephone while driving a vehicle.
If using a hand-held phone park the vehicle before conversing.
Always secure the phone in its holder; do not place the phone on the passenger seat or where it can break loose in a collision or sudden stop.

The use of an alert device to operate a vehicle's lights or horn on public roads is not permitted.

Remember, road safety always comes first!

Operating environment

Remember to follow any special regulations in force in any area and always switch off your phone whenever it is forbidden to use it, or when it may cause interference or danger.

When connecting the phone or any accessory to another device, read its user's guide for detailed safety instructions. Do not connect incompatible products.

As with other mobile radio transmitting equipment, users are advised that for the satisfactory operation of the equipment and for the safety of personnel, it is recommended that the equipment should only be used in the normal operating position (held to your ear with the antenna pointing over your shoulder).

Electronic devices

Most modern electronic equipment is shielded from radio frequency (RF) signals. However, certain electronic equipment may not be shielded against the RF signals from your wireless phone.

Pacemakers

Pacemaker manufacturers recommend that a minimum separation of 6 inches (20 cm.) be maintained between a handheld wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research.

Persons with pacemakers:

- Should always keep the phone more than 6 inches (20 cm) from their pacemaker when the phone is switched on;
- Should not carry the phone in a breast pocket;
- Should use the ear opposite the pacemaker to minimize the potential for interference.
- If you have any reason to suspect that interference is taking place, switch off your phone immediately.

Hearing aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may want to consult your service provider.

Other medical devices

Operation of any radio transmitting equipment, including cellular phones, may interfere with the functionality of inadequately protected medical devices. Consult a physician or the manufacturer of the medical device to determine if they are adequately shielded from external RF energy or if you have any questions. Switch off your phone in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles (e.g. electronic fuel injection systems, electronic anti-skid (anti-lock) braking systems, electronic speed control systems, air bag systems). Check with the manufacturer or its representative regarding your vehicle. You should also consult the manufacturer of any equipment that has been added to your vehicle.

Posted facilities

Switch your phone off in any facility where posted notices so require.

Potentially explosive atmospheres

Switch off your phone when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Users are advised to switch off the phone while at a refueling point (service station). Users are reminded of the need to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants or where blasting operations are in progress.

Areas with a potentially explosive atmosphere are often but not always clearly marked. They include below deck on boats; chemical transfer or storage facilities; vehicles using liquefied petroleum gas (such as propane or butane); areas where the air contains chemicals or particles, such as grain, dust or metal powders; and any other area where you would normally be advised to turn off your vehicle engine.

Vehicles

Only qualified personnel should service the phone, or install the phone in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty which may apply to the unit.

Check regularly that all wireless phone equipment in your vehicle is mounted and operating properly.

Do not store or carry flammable liquids, gases or explosive materials in the same compartment as the phone, its parts or accessories.

For vehicles equipped with an air bag, remember that an air bag inflates with great force. Do not place objects, including both installed or portable wireless equipment, in the area over the air bag or in the air bag deployment area. If in-vehicle wireless equipment is improperly installed and the air bag inflates, serious injury could result.

Switch off your phone before boarding an aircraft. The use of wireless telephones in an aircraft may be dangerous to the operation of the aircraft, disrupt the wireless telephone network and may be illegal.

Failure to observe these instructions may lead to the suspension or denial of telephone services to the offender, or legal action, or both.

Emergency calls

IMPORTANT!

This phone, like any wireless phone, operates using radio signals, wireless and landline networks as well as user- programmed functions which cannot guarantee connection in all conditions. Therefore, you should never rely solely upon any wireless phone for essential communications (e.g. medical emergencies).

Remember, to make or receive any calls the phone must be switched on and in a service area with adequate signal strength. Emergency calls may not be possible on all wireless phone networks or when certain network services and/or phone features are in use. Check with local service providers.

Making an emergency call

1 If the phone is not on, switch it on. Some networks may require that a valid SIM card is properly inserted in the phone.

2 Press and hold the key for several seconds to ready the phone for calls.

3 Key in the emergency number for your present location (e.g. 911 or other official emergency number). Emergency numbers vary by location.

4 Press **Call**.

If certain features are in use (Keyguard, fixed dialing, etc.), you may first need to turn those features off before you can make an emergency call. Consult this document and your local cellular service provider.

When making an emergency call, remember to give all the necessary information as accurately as possible. Remember that your wireless phone may be the only means of communication at the scene of an accident - do not cut off the call until given permission to do so.

Radio frequency (RF) signals

Your wireless handheld portable telephone is a low power radio transmitter and receiver. When it is ON, it receives and also sends out radio frequency (RF) signals.

In August, 1996, the Federal Communications Commission (FCC) adopted RF exposure guidelines with safety levels for handheld wireless phones. Those guidelines are consistent with safety standards previously set by both U.S. and international standards bodies:

ANSI C95.1 (1992)*, NCRP Report 86 (1986)*, ICNIRP (1996)*.

Those standards were based on comprehensive and periodic evaluations of the relevant scientific literature. For example, over 120 scientists, engineers, and physicians from universities, government health agencies and industry reviewed the available body of research to develop the ANSI Standard (C95.1).

The design of your phone complies with the FCC guidelines (and those standards).

*American National Standards Institute, National Council on Radiation Protection and Measurements; International Commission on Non-Ionizing Radiation Protection.

Care and maintenance

Your phone is a product of superior design and craftsmanship and should be treated with care. The suggestions below will help you to fulfill any warranty obligations and allow you to enjoy this product for many years. When using your phone, battery, charger, OR any accessory:

- Keep it and all its parts and accessories out of small children's reach.
- Keep it dry. Precipitation, humidity and liquids contain minerals that will corrode electronic circuits.
- Do not use or store it in dusty, dirty areas as its moving parts can be damaged.
- Do not store it in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not store it in cold areas. When the phone warms up (to its normal operating temperature), moisture can form inside the phone, which may damage the phone's electronic circuit boards.
- Do not attempt to open it. Non-expert handling of the device may damage it.
- Do not drop, knock or shake it. Rough handling can break internal circuit boards.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean it. Wipe it with a soft cloth slightly dampened in a mild soap-and-water solution.
- Do not paint it. Paint can clog the device's moving parts and prevent proper operation.
- Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications or attachments could damage the phone and may violate regulations governing radio devices.
- If the phone, battery, charger, or any accessory is not working properly, take it to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

Appendix D: Technical information

Weight:	6 oz. with BMS-2S battery
Transmitting power:	1 W nominal
Operating voltage:	3.6V dc 12V dc for car kit
Frequency band:	1850.2 to 1909.8 MHz (TX) 1930.2 to 1989.8 MHz (RX)
Number of channels:	512 to 810
Memory locations:	Up to 255 depending on SIM card
Memory capacity:	Depends on SIM card

USA
NOKIA MOBILE PHONES
6200 Courtney Campbell Causeway, Ste. 900
Tampa, FL 33607
Tel: 1-888-NOKIA2U (1-888-665-4228)

CANADA
NOKIA PRODUCTS LTD.
575 Westney Rd. South
Ajax, Ontario L1S 4N7
Tel: (905) 427-6654

Part No. 9351793 Printed in Canada 06/98

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The information contained in this Owner's Manual was written for Nokia phone NSB-1NX.

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These commodities are authorized by the U.S. Government for export only to Canada, Mexico, or the United States. They may not be resold, diverted, transferred, or otherwise disposed of in any other country, either in their original form or after being incorporated through an intermediate process into other end-items, without the written approval of the U.S. Department of State.

Appendix E: Nokia Limited Warranty

Nokia Mobile Phones, Inc. (“NMP”) warrants that this cellular phone (“Product”) is free from defects in material and workmanship, according to the following terms and conditions:

1. The limited warranty for the Product extends for one (1) year beginning on the date of purchase of the Product.

2. The limited warranty extends only to the original consumer purchaser (“Consumer”) of the Product and is not assignable or transferable to any subsequent purchaser/end-user.

3. The limited warranty extends only to Consumers who purchase the Product in the United States.

4. During the limited warranty period, NMP will repair, or replace, at NMP’s option, any defective parts, or any parts that will not properly operate for their intended use with new or factory rebuilt replacement items. No charge will be made to the Consumer for any such parts. NMP will also pay for the labor charges incurred by NMP in repairing or replacing the defective parts. The external housing and cosmetic parts shall be free of defects at the time of shipment and, therefore, shall not be covered under these limited warranty terms.

5. Upon request from NMP, the Consumer must provide information to reasonably prove the date of purchase.

6. The Consumer shall bear the cost of shipping the Product to NMP in Melbourne, Florida. NMP shall bear the cost of shipping the Product back to the Consumer after the completion of service under this limited warranty.

7. The Consumer shall have no coverage or benefits under this limited warranty if any of the following conditions are applicable:

a) The Product has been subject to: abnormal use, abnormal conditions, improper storage, exposure to moisture or dampness, unauthorized modifications, unauthorized connections, unauthorized repair, misuse, neglect, abuse, accident, alteration, improper installation, or other acts which are not the fault of NMP, including damage caused by shipping and blown fuses.

b) NMP was not notified by Consumer of the alleged defect or malfunction of the Product during the applicable limited warranty period.

c) The Product serial number plate or the accessory date code has been removed, defaced or altered.

d) The defect or damage was caused by the defective function of the cellular system, or by inadequate signal reception by the external antenna.

8. If a problem develops during the limited warranty period, the Consumer should take the following step-by-step procedure:

a) The Consumer shall return the Product to the place of purchase for repair or replacement processing.

b) If "a" is not convenient the Consumer shall ship the Product prepaid and insured to:

Nokia Mobile Phones, Inc.
Attn.: Repair Department
795 West Nasa Blvd.
Melbourne, FL 32901

The customer shall include a return address, daytime phone number and/or fax number, complete description of the problem, proof of purchase, and service agreement (if applicable). Expenses related to removing the Product from an installation are not covered under this limited warranty.

d) The Consumer will be billed for any parts or labor charges not covered by this limited warranty. The Consumer shall be responsible for expenses related to reinstallation of the Product.

e) If the Product is returned to NMP during the limited warranty period, but the problem with the Product cannot be fixed under the terms and conditions of this limited warranty, the Consumer will be notified and given an estimate of the charges the Consumer must pay to have the Product repaired, with all shipping charges billed to the Consumer. If the estimate is refused, the Product will be returned freight collect. If the Product is returned to NMP after the expiration of the warranty period, NMP's normal service policies shall apply and the Consumer will be invoiced for all shipping charges.

9. The Product consists of newly assembled equipment that may contain used components which have been reprocessed to allow machine compliance with Product performance and reliability specifications.

10. ANY IMPLIED WARRANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OR USE, SHALL BE LIMITED TO THE DURATION OF THE FOREGOING WRITTEN WARRANTY, OTHERWISE, THE FOREGOING WARRANTY IS THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. NMP SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OR A LOSS OF ANTICIPATED BENEFITS OR PROFITS, RESULTING FROM THE PURCHASE OR USE OF THE PRODUCT OR ARISING FROM THE BREACH OF THE WARRANTY EVEN IF NMP KNEW OF THE LIKELIHOOD OF SUCH DAMAGES.

11. Some states do not allow limitation of how long an implied warranty lasts, so the above limitation may not apply to you (the Consumer). Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusions may not apply to you (the Consumer). This limited warranty gives you specific legal rights and you may also have other rights which vary from state to state.

12. NMP neither assumes nor authorizes any authorized service center or any person or entity to assume for it any other obligation or liability beyond that which is expressly provided for in this limited warranty.

13. Questions concerning this limited warranty may be directed to:

Nokia Customer Service
6200 Courtney Campbell Causeway, Ste. 900
Tampa, FL 33607
phone: 1-888-NOKIA2U (1-888-665-4228) or (813) 288-3800
fax: (813) 287-6612

14. The limited warranty period for NMP supplied attachments and accessories are specifically defined within their own warranty cards and packaging.

Para obtener un manual del usuario en español favor de llamar o enviar un fax al teléfono 1-888-NOKIA2U (1-888-665-4228), fax 813-287-6612.